

B) Remarks:

JP 2002-358633 (Makoto) has an object that the polymer film is not floated from the cooling roller even when the power is turned off due to anomalous discharge of the electron gun as the electron beam evaporation deposition source (paragraph [0007]). As a means for attaining the object, the film (1) is charged by being irradiated with electron beams (31) from the charging electron gun (28) prior to the deposition, whereby the film (1) is brought into strong and intimate contact with the cooling roller (6) (paragraph [0026]).

US 5,258,074 (Okuda) describes that the film (1) is brought into close contact with the drum (4) by applying a minus voltage to the film (1) onto which a metal has been deposited.

However, neither reference describes that the base film is brought into close contact with the cooling roller by charging the base film by irradiation of electron beams prior to the deposition and applying a bias voltage to the deposition layer after the deposition. Moreover, there is no description that suggests combining those techniques.

Furthermore, the present invention attains, to an extent unpredictable by those skilled in the art, an increase in deposition speed by carrying out both the charging of the base film by irradiation of charged particles and application of a bias voltage to the base film to thus bring the base film into close contact with the cooling roller.

The object of the present invention is to increase the deposition speed (paragraph [0011]), but neither Makoto nor Okuda include descriptions regarding the deposition speed. Therefore, combining Makoto and Okuda to achieve the invention of the present invention that aims at increasing the deposition speed cannot be easily attained. In fact, their combination cannot and does not even provide or suggest the present invention as claimed.

Further, Makoto describes that the film is separated from the cooling roller by use of electricity removal means and the like that ejects an inert gas (paragraph [0033]), which implies that Makoto has no recognition that adhesion weakens after deposition of the metal. Thus, no description is made regarding the idea that when the deposition speed is increased, adhesion after deposition becomes insufficient with only the use of the electron gun.

Furthermore, Okuda describes that the adhesion between the metal layer and the film is controlled by applying a minus voltage to the film on which the metal has been deposited (col. 3, lines 47-63). However, Okuda includes no description nor suggestion that the deposition speed can be increased by charging the film prior to the deposition to thus enhance adhesion thereof.

As described above, there is no description based on which those skilled in the art can predict that the deposition speed can be increased by combining Makoto and Okuda. Thus, it cannot be said that combining Makoto and Okuda to increase the deposition speed can easily be achieved or obvious to try by those skilled in the art.

In addition, because the present invention realizes a significant increase in speed unpredictable by those skilled in the art, the present invention is unobvious to those skilled in the art.

In view of the foregoing remarks, it is believed that this application is in condition for allowance. Accordingly, favorable reconsideration with notice of allowance is requested.

Should any minor amendments be required to place the application in condition for allowance, the Examiner is requested to telephone the undersigned Attorney of Record so that such changes may be made by Examiner's Amendment.

Respectfully submitted,

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EB543483848US)